## ABSTRACT OF THE DISCLOSURE

A vibration-inhibiting flooring structure for use in a facility housing vibration sensitive equipment includes a perforated bearing floor which includes a number of openings configured to inhibit the propagation of vibrations across the floor. Such a flooring structure may be used, for example, in connection with advanced clean-room facilities, where a facilities room and one or more plenums are provided in conjunction with the vibration-inhibiting floor.